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Application No. 10/633,063

G.E. Docket No. 134358XZ

REMARKS

The present application includes claims 1-20. Claims 1-20 were rejected by the Examiner. Claim 15 has been amended by this response.

Claims 1-20 were rejected under 35 U.S.C. § 102(b) as being anticipated by Gordon et al. (U.S. Patent No. 5,808,376).

The Applicants first turn to the Examiner's rejection of claims 1-6 over Gordon. Gordon relates to an apparatus for powering a large scale medical imaging system, such as a CT scanner. In Gordon, the imaging system operates off of a regulated DC voltage, from an external power source and a battery-powered uninterruptible power supply (UPS), "so that the batteries are charging during normal conditions of the external power supply and instantaneously provide power when the external power falls below the threshold level provided by the batteries." (see column 4, lines 4-14). In Gordon, the UPS powers all of the components for the entire CT scanner operation in the event of external power disruptions (see column 9, lines 39-54). Thus, Gordon discloses a system for engaging a UPS for powering an entire imaging system when the external power drops below a measured threshold. Gordon also discloses a system where available power is apportioned according to particular system functions to be performed, where certain functions are of higher priority than other functions (see column 14, lines 56-65).

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Embodiments of the present invention include a power controller to allocate power between the main system power and a battery charger "based on a current measurement from the measurement unit." This limitation is recited in independent claim 1 and is thus included in dependent claims 2-6. Although Gordon discloses a UPS/battery system to power a CT scanner when external power falls below a threshold level, Gordon does not disclose a power controller that allocates power between the main system power and the battery charger based on this current measurement from the measurement unit. Gordon does not indicate that the allocation of power is based upon the information obtained from a measurement unit; Gordon merely indicates that if enough power is not available, lower priority functions will not be powered. In Gordon, the IVCSC module 202 only provides over-power protection; power is not allocated among multiple components based upon a current measurement. (see column 11, lines 45-55). Thus, Gordon does not indicate that power is allocated based upon current measured from the measurement unit.

The Applicant also respectfully argues that dependent claims 2-6 are not disclosed by Gordon. For example, with respect to claim 6, Gordon does not teach a power controller that dynamically allocates power within a power limit. Gordon does not disclose that the power allocated to system components changes with respect to a given power limit. Gordon merely discloses that, if enough power is not available (i.e., there is a certain power limit), non-critical system functions will not have power. (see column 14, line 56 – column 15, line 10). Gordon does not disclose a power controller that can dynamically change the power allocated to the various system functions.

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The Applicant next turns to the Examiner's rejection of claims 7-14 as being anticipated by Gordon. As discussed above, Gordon teaches the use of a UPS which provides power to all of the components for the entire CT scanner operation in the event of an external power disruption (see column 9, lines 39-54). Gordon does not teach "allocating power in the imaging system based on a system configuration and the current input in the imaging system." This limitation is recited in independent claim 7 and is thus contained in dependent claims 8-14.

As discussed above, Gordon discloses apportioning power where "certain functions are of higher priority than other functions, and therefore are last to be deprived of power." In embodiments of the present invention, however, power is allocated not merely based upon a static hierarchy of system priority as in Gordon (see column 14, line 66-67: "[C]harging of the battery 16 is a lower priority than most other system functions."), but is rather based upon both a system configuration (for example, whether components such as an image printer are operational) and the current input in the imaging system.

The Applicant respectfully urges that Gordon does not disclose all limitations in dependent claims 8-14. For example, with respect to claim 10, Gordon discloses a power factor corrector 80 which corrects for power inefficiencies created by input impedance of the system (column 8, lines 9-12), however Gordon does not disclose a method whereby power is reallocated to different components based on a change of system configuration. Embodiments of the present invention allow for power to be reallocated based upon a change in the configuration of the system (for example, the addition or subtraction of a

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component, such as an image printer). With respect to claim 11, the Applicant respectfully urges that Gordon does not disclose a method for re-allocating power in the imaging system based on current consumption exceeding a predefined limit. Although Gordon discloses an over-power protection circuit (column 11, lines 45-55), Gordon does not disclose a system that may re-allocate power to different components (for example, to turn a component on, see paragraph 24) if current consumption exceeds a predefined limit.

Independent claim 15 has been amended to further recite a power management controller allocating available power among components in the imaging system "based on upon system configuration." For the reasons discussed above, the Applicant believes that Gordon does not disclose a power management controller which allocates power in the system based upon a system configuration.

Thus, the Applicant respectfully submits that independent claims 1, 7, and 15, as well as their respective dependent claims, are allowable.

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CONCLUSION

The Applicant submits that the present application is in condition for allowance.

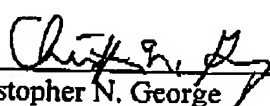
If the Examiner has any questions or the Applicant can be of any assistance, the Examiner is invited and encouraged to contact the Applicant at the number below.

The Commissioner is authorized to charge any necessary fees or credit any overpayment to the Deposit Account of GTC, Account No. 070845.

Respectfully submitted,

Date:

1/11/06


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